

The development of inclusive education management model: Practical guidelines for learning in inclusive school

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ABSTRACT

This research aimed to explore the current conditions, problems, and needs in the implementation of inclusive education, to examine the best model of the implementation of inclusive education and to investigate the effectiveness of the inclusive education model. This research was mixed method research which was conducted in three stages. Stage one was exploring the current conditions, problems, and the needs on inclusive education implementation. Stage two was formulating an inclusive education learning model and stage three was determining the efficiency of the inclusive education model. Findings reveal that students and learning are the biggest obstacle in implementing inclusive education, while management, students, and learning are the most important factors to be considered in implementing inclusive education model. Based on the findings, the whole school inclusive education model was developed which consisted of three stages namely input, process, and output. It was suggested that during the implementation of this model collaboration should be emphasized.

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1. INTRODUCTION

The oldest special education model is a segregation model that places children with disabilities in special schools, separate from their peers. These schools have a curriculum, teaching methods, learning facilities, evaluation systems, and specialized teachers which are specially designed based on the type of disabilities [1, 2]. In terms of management, the segregation model is indeed beneficial, because it is easy for teachers and administrators to manage children with disabilities who need specially-designed treatments [1]. However, from the students' perspective, the segregation model is probably detrimental. For example, research studies by Chesmore and Reynolds [3], Stanford et al [4] and Stetser & Stilwell [5] reported that children receiving special education services mostly have lower rates of high school completion, greater rates of depression, substance misuse, and incarceration. Furthermore, it is also reported that placement in special education probably related to poor mental health functioning that often exist into adulthood [6]. Despite these findings, philosophically the model of segregation is not logical, because it prepares students to later integrate with normal communities, but they are separated from normal society. Another disadvantage that is not less important is that the segregative model is relatively expensive, particularly in Indonesia [7].

Given the negative effects of special school placement, Indonesia has implemented the inclusive education system ever since the stipulation of the Indonesia's Ministry of Education Regulation Number 9/2009. Inclusive education is the latest development of the model of education for children with disabilities

which was formally confirmed later in Salamanca's statement at the World Conference on Disabled Education in June 1994 that "the fundamental principles of inclusive education are: as long as possible, all children should learn together regardless of difficulties or the differences that might exist in them. Therefore, inclusive management considers education which allows each child to learn together, be recognized and given equal educational opportunities. Staub and Peck [8] explained that inclusive education is the educational placement of children with disabilities either on the level of mild, moderate, or severe in the regular class. This shows that the regular class is a place of learning that is relevant for children with disabilities, regardless of the type of abnormality and whatever the gradation. Meanwhile, inclusive education also could be understood as a system of education services that requires all children with disabilities be served in the nearest schools, in regular classes with friends of their age [9]. Therefore, the school restructuring is emphasized, so that it becomes a community that supports the fulfillment of the special needs of each child, meaning that it is rich in learning resources and gets support from all parties, namely students, teachers, parents, and community. Through inclusive education, children with disabilities are educated together with other typically developing children to optimize their potential [10, 11]. This is based on the fact that in society there are typically developing children and children with disabilities who cannot be separated as a community. In addition, Stainback and Stainback [12] define inclusion as the education provided by schools for all children regardless of their background, economic, social and cultural background. Therefore, schools look for ways to facilitate children to learn together and share the benefits of learning." Similarly, Kuyani and Desai [13] state that "inclusion in school settings is to provide education for all, because it is a place where everyone participates, is accepted and supported by peers and staff and society, in meeting the needs for student development".

There are some documented benefits of inclusive education system for children with disabilities. Firstly, inclusion was mostly related to either positive or neutral effects on academic outcomes among non-disabled students [14]. Moreover, it was reported that there is no relation between the lower rates of students who continued to upper secondary education [15]. It was also evidence that non-disabled students in inclusive schools have better positive views towards students with disabilities [16]. Similarly, for students with disabilities inclusive setting has shown to positively affect their development. A study among nearly 760 students in the United States showed that students with disabilities improved their language skills [17]. Indeed, this finding is in line with studies by de Graff, van Hove, & Haveman [18] and de Graaf & van Hove [19] which reported that students with down syndrome performed better on academic skills in inclusive schools. Another research study by Schiftler [20] found that students with disabilities on inclusive schools were likely graduated on time compared to students with disabilities in segregated settings. In terms of social skill development, it was reported that inclusion would help students with disabilities to improve their social skill development [21].

Previous paragraph has discussed the benefits of inclusive education for all students. In terms of its implementation, each component of the school providing inclusive education needs to understand the key indicators which are the minimum criteria of inclusive education [22-24]. By understanding key indicators, the management of inclusive education can be measured and improved on an ongoing and accountable basis. There are a number of indicators that must be a concern for education units that administer inclusive education, namely institutional indicators, curriculum and learning, workforce, student affairs, facilities and infrastructure, and financing (Peder). Each indicator has developed a number of items that can be used by educational units to conduct self-assessments. From the results of self-assessment, schools can find out their position (level of performance) as a school providing inclusive education. Recognizing these ideas, a proper inclusive education model needs to be developed in order to ensure that the implementation of inclusive education is appropriate and beneficial.

There is a plethora of studies that have investigated the proper development of inclusive education model. A study by Van der Bij, Geijsel, Garst and Dam [25] has developed the three core aspects of inclusivity namely the learning environment, the general care and the guidance provided by the teachers. Another study in Kenya showed that it was essential to work with stakeholders and government, while at the same time expanding the cooperation with other relevant parties [26]. This mirrors the comparative research study by Engelbrecht et al. [27] which suggested the importance of collaboration. Furthermore, a qualitative study in New Zealand reported that there is a need of a flexible Index tool in order to reach the sustainable whole school development and professional learning in implementing inclusive education [28]. Another inclusive education model was implementing the three-block model of Universal Design for Learning which has positively impacted the teachers' self efficacy and job satisfaction in inclusive schools in Canada [29]. In Asian countries, there was only one study that explicitly developed the inclusive model which was held in Thailand. This study reported that there were three important aspects of inclusive education model [30].

Based on the previous paragraphs, the appropriate inclusive education is beneficial and important to support the development of students with disabilities, yet the study on the development of inclusive

education model particularly in Indonesia is still scarce. Therefore, this present study aimed to explore the current conditions, problems, and needs in the implementation of inclusive education in Pasuruan City, Indonesia and aimed to examine the best practices of inclusive schools in that city alongside with find out the effectiveness of the inclusive education learning management model.

2. RESEARCH METHOD

This research was mixed method research based on the [31] Quantitative data were collected using surveys on the topics of current conditions, problems, and requirements for inclusive education implementation, while on the same time collected the opinions from experts. Whilst, qualitative data were collected using in-depth observations and in-depth interviews. This research was conducted during three stages in the one city in Indonesia. Stage one was intended to understand the latest conditions, and the issue of implementing inclusive education. Participants from the stage 1 were 120 people including school administrators, teachers, school committees and parents from six secondary schools in Pasuruan City. Data were analyzed to identify the conceptual framework of research and the issue of the implementation of inclusion education. Stage two was aimed at formulating an inclusive education model based on the result of the stage one. This stage consisted of three steps namely creating the inclusive education model, review process by four experts, and revising the model based on the experts' suggestions. The third stage was determining the efficiency of the inclusive education model in. In this stage, the effectiveness of the inclusive education model was examined in the pilot schools.

3. RESULTS AND ANALYSIS

3.1. The result of analysis on the issues on the inclusive education implementation

Based on the table 1 the results of the analysis showed that the issue of inclusive implementation is at a moderate level, with an overall average value of 3.38. This duplicate the previous finding by Bubpha, Erawan and Saihong [30] which reported that the level of problem on inclusive education provision was on the moderate level. In detail, the aspect of management was on the moderate level with the mean of 3.47. Other aspects which achieved the moderate level were curriculum, evaluation, and external support. As seen in Table 1, students and learning have the high level of issues. This finding mirrors the previous study by [32-34]. All these studies reported that teachers are struggling in delivering learning in inclusive schools. Moreover, this finding supports the importance of teacher training to ensure teachers can understand their students and deliver the lesson that is benefit for all students [35].

Table 1. The issues on the inclusive education implementation

Implementation of inclusive education	Mean	Standard Deviation	Level of issues
Management	3.47	.54	Moderate
Students	3.55	.54	High
Curriculum	3.32	.52	Moderate
Learning	3.17	.80	High
Evaluation	3.47	.54	Moderate
External Support	3.32	.52	Moderate
Total	3.38	.49	Moderate

3.2. The result of analysis on the level of needs on the inclusive education implementation

Relating to the Table 2, overall there is a need to improve every aspects of the implementation of inclusive education. The aspects which got the highest-level including management, students, and learning. Indeed, this finding consistent with the finding on the previous aspect which shows that learning and students are the biggest issue on inclusive education implementation. Whereas, other aspects received the moderate level of needs. Studies have shown that management of inclusive education is important which involves the collaboration process to support the inclusive school [25-27].

Table 2. The level of needs on the inclusive education implementation

Implementation of inclusive education	Mean	Standard Deviation	Level of needs
Management	3.63	.76	High
Students	3.68	.67	High
Curriculum	3.47	.54	Moderate
Learning	3.63	.76	High
Evaluation	3.43	.82	Moderate
External Support	3.43	.82	Moderate
Total	3.51	.58	High

3.3. Inclusive education model – the whole school system

Based on findings on section 3.1 and 3.2, it can be recognized that the main problems are related to students with special needs and the learning process for students with special needs in inclusive schools. Therefore, efforts are needed to overcome these problems by developing an appropriate and effective learning model for inclusive schools. There are two things to be considered on developing the inclusive education model Firstly, an efficient, effective and useful educational setting is needed by conducting an ecological approach to detect and correct teaching programs by discussing the main variables on learning. Secondly, in inclusive school, students have diverse needs and all their needs must be met.

Based on these ideas, there are three important phases on inclusive education model including 1) Planning for the development of every child with special needs using the instructional program. 2) Carry out student development activities for inclusive education; and 3) Measuring and evaluating real situations to improve individual student development.

The Figure 1 illustrates the model that was developed. In general, this inclusive education model was based on the whole school system. This model includes input (aspects of management), process (learning management), and output (developing student quality). The detail explanation is as follows:

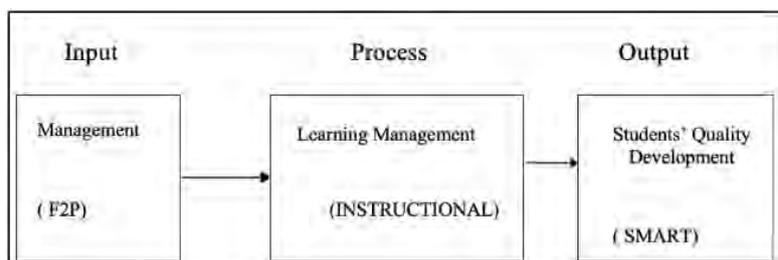


Figure 1. Inclusive education model.

- a. Management of F2P (Physiological Environment, Physical Environment and Psychotic environment is an input that gives a big influence on the learning process environment in schools, this environment will gather to influence behavior in students and teachers so that proper analysis of each instructional setting is needed.
- b. Instructional Management is a dynamic process to produce a dynamic system, an ecosystem in which there is a balance between different elements of the environment. The principles in instructional management in learning are:
 - Build a positive climate
 - Arrange settings orderly
 - Implement preventive planning
 - Make an efficient schedule
 - Group students for learning
 - Use materials and tools effectively
 - Convey the appropriate teaching instructions
 - Develop an effective discipline plan
 - Interventions in school, home and community settings
 - Teach with joy and satisfaction.

The principle developed when applied to the inclusive schools will have an impact on the success of the inclusive school learning process namely learning without discrimination. Katz [29] and Bupha, Erawan and Saihong [30] argued that diversity in providing educational services must accommodate the whole

between regular students and students with special needs. Schools must be able to transform an appropriate approach for children with special needs. Quality assurance is done by modifying the curriculum, administrative organization, and appropriate pedagogical strategies. Collaboration is very supportive in the management of inclusive education [25-27]. Consistent support and services are provided, according to the special needs of inclusive students. Every child must get services for justice and equality.

- c. Development of the students' quality who are smart, meaning that with careful planning in the management of inclusive education, the function is to produce intelligent students. Students who have the potential that can be developed in inclusive schools. This process is based on proper identification and assessment so that the students' quality will be developed.

3.4. The effectiveness of the development of the inclusive education model

The results of the development of the learning model then were validated by experts on the effectiveness of the model that was previously developed. Moreover, small-scale trial was done in schools. Results from the trial showed that collaboration is essential to ensure the better implementation of inclusive education. This is in line with the findings from previous research studies [26-28] which showed that collaboration between school members and cooperation with stakeholders and government is essential.

4. CONCLUSION

This study aimed at exploring the current conditions, problems, and needs in the implementation of inclusive education in Pasuruan City, Indonesia and aimed at developing the best model for inclusive education implementation alongside with find out the effectiveness of the inclusive education model. Findings reveal that students and learning are the biggest obstacle in implementing inclusive education, while management, students, and learning are the most important factors to be considered in implementing inclusive education model. Based on the findings, the whole school inclusive education model was developed which consisted of three stages namely input, process, and output. It was suggested that during the implementation of this model collaboration should be emphasized.

REFERENCES

- [1] Norwich B, "Special schools: What future for special schools and inclusion? Conceptual and professional perspectives," *Br J Spec Educ*, vol. 35, no. 3, pp. 136-43, 2008.
- [2] Kassah BLL and Kassah AK, "Phillips D. Children with intellectual disabilities and special school education in Ghana," *Int J Disabil Dev Educ*, vol. 65, no. 3, pp. 341-54, 2018.
- [3] Chesmore AA, Ou S-R, and Reynolds AJ, "Childhood placement in special education and adult well-being," *J Spec Educ*, vol. 50, no. 2, pp. 109-20, 2016.
- [4] Sanford C, Newman L, Wagner M, Cameto R, and Knokey A-M, Shaver D, "The post-high school outcomes of young adults with disabilities up to 6 years after high school: key findings from the National Longitudinal Transition Study-2 (NLTS2)," *NCSE 2011-3004. Natl Cent Spec Educ Res*. 2011.
- [5] Stetser MC and Stillwell R, "Public high school four-year on-time graduation rates and event dropout rates: school years 2010-11 and 2011-12," *First Look. NCES 2014-391, Natl Cent Educ Stat*, 2014.
- [6] Colman I, *et al.*, "Outcomes of conduct problems in adolescence: 40 year follow-up of national cohort," *BMJ*, 338:a2981, 2009.
- [7] Primadata AP, Soemanto RB, and Haryono B. "Parents Action on Attending Childern with Special Needs in Inlusive School Service at 1 Tanjung Primary School South Purwokerto District Purwokerto City (in Bahasa)," *J Anal Sociol*, vol. 4, no. 1, 2018.
- [8] Staub D and Peck CA, "What Are the Outcomes for Nondisabled Students?," *Educational Leadership*, vol. 52, no. 4, pp. 36-40, 1995.
- [9] O'Neil J., "Can Inclusion Work? A Conversation with Jim Kauffman and Mara Sapon-Shevin," *Educational Leadership*, vol. 52, no. 4, pp. 7-11, 1995.
- [10] Hehir T, Grindal T, Freeman B, Lamoreau R, Borquaye Y, and Burke S., *A summary of the evidence on inclusive education*, Abt Assoc, 2016.
- [11] Freiberg HJ, Stein TA, and Huang S. "Effects of a classroom management intervention on student achievement in inner-city elementary schools," *Educ Res Eval*, vol. 1, no. 1, pp. 36-66, 1995.
- [12] Stainback SBE and Stainback WC, *Inclusion: A guide for educators*, Paul H Brookes Publishing, 1996.
- [13] Kuyini AB and Desai I, "Principals' and teachers' attitudes and knowledge of inclusive education as predictors of effective teaching practices in Ghana," *J Res Spec Educ Needs*, vol. 7, no. 2, pp. 104-13, 2007.
- [14] Ruijs NM and Peetsma TTD, "Effects of inclusion on students with and without special educational needs reviewed," *Educ Res Rev*, vol. 4, no. 2, pp. 67-79, 2009.
- [15] Kirjavainen T, Pulkkinen J, and Jahnuukainen M, "Special education students in transition to further education: A four-year register-based follow-up study in Finland," *Learn Individ Differ*, vol. 45, pp. 33-42, 2016.

- [16] Consiglio A, Guarnera M, and Magnano P, "Representation of disability. verification of the contact hypothesis in school," *Procedia-Social Behav Sci*, vol. 191, pp. 1964-1969, 2015.
- [17] Justice LM, Logan JAR, Lin T-J, and Kaderavek JN, "Peer effects in early childhood education: Testing the assumptions of special-education inclusion," *Psychol Sci.*, vol. 25, no. 9, pp. 1722-1729, 2014.
- [18] de Graaf G, Van Hove G, and Haveman M, "More academics in regular schools? The effect of regular versus special school placement on academic skills in Dutch primary school students with Down syndrome," *J Intellect Disabil Res*, vol. 57, no. 1, pp. 21-38, 2013.
- [19] Van Hove G, "Learning to read in regular and special schools: A follow up study of students with Down Syndrome," *Life Span Disabil*, vo. 18, no. 1, pp. 7-39, 2015.
- [20] Schifter LA, "Using survival analysis to understand graduation of students with disabilities," *Except Child*, vol. 82, no. 4, pp. 479-96, 2016.
- [21] Schwab S, "Social dimensions of inclusion in education of 4th and 7th grade pupils in inclusive and regular classes: Outcomes from Austria," *Res Dev Disabil*, pp. 72-79, 2015.
- [22] Slee R, "Inclusive education: From policy to school implementation," In: *Towards inclusive schools? Routledge*, pp. 30-41, 2018.
- [23] Lakkala S, *et al.*, "How to make the neighbourhood school a school for all? Finnish teachers' perceptions of educational reform aiming towards inclusion," *J Res Spec Educ Needs*, vol. 16, no. 1, pp. 46-56, 2016.
- [24] Nishina A, Lewis JA, Bellmore A, and Witkow MR, "Ethnic diversity and inclusive school environments," *Educ Psychol*, pp. 1-16, 2019.
- [25] Van der Bij T, Geijsel FP, Garst GJA, and Ten Dam GTM, "Modelling inclusive special needs education: insights from Dutch secondary schools," *Eur J Spec Needs Educ*, vol. 31, no. 2, pp. 220-235, 2016.
- [26] Adoyo PO and Odeny ML, "Emergent inclusive education practice in Kenya, challenges and suggestions," *International Journal of Research in Humanities and Social Studies*, vol. 2, no. 6, pp. 47-52, Jun 2015
- [27] Engelbrecht P, Savolainen H, Nel M, Koskela T, and Okkolin M-A, "Making meaning of inclusive education: Classroom practices in Finnish and South African classrooms," *Comp A J Comp Int Educ.*, vol. 47, no. 5, pp. 684-702, 2017.
- [28] McMaster C, "Inclusion in New Zealand: The potential and possibilities of sustainable inclusive change through utilising a framework for whole school development," *New Zeal J Educ Stud.*, vol. 50, no. 2, pp. 239-53, 2015.
- [29] Katz J, "Implementing the Three Block Model of Universal Design for Learning: effects on teachers' self-efficacy, stress, and job satisfaction in inclusive classrooms K-12," *Int J Incl Educ.*, vol. 19, no. 1, pp. 1-20, 2015.
- [30] Bubpha S, Erawan P, and Saihong P, "Model development for inclusive education management: Practical guidelines for inclusive schools," *J Educ Pract*, vol. 3, no. 8, pp. 223-32, 2012.
- [31] Creswell JW and Clark VLP, *Designing and conducting mixed methods research*, Sage publications, 2017.
- [32] Chiner E and Cardona MC, "Inclusive education in Spain: how do skills, resources, and supports affect regular education teachers' perceptions of inclusion?," *Int J Incl Educ.*, vol. 17, no. 5, pp. 526-541, 2013.
- [33] Oswald M and Swart E, "Addressing South African pre-service teachers' sentiments, attitudes and concerns regarding inclusive education," *Int J Disabil Dev Educ.*, vol. 58, no. 4, pp. 389-403, 2011.
- [34] Alhassan AM., "Implementation of inclusive education in Ghanaian primary schools: A look at teachersattitudes," *Am J Educ Res.*, vol. 2, no. 3, pp. 142-148, 2014.
- [35] Gottfried MA., "Classmates with disabilities and students' noncognitive outcomes," *Educ Eval Policy Anal.*, vol. 36 no. 1, pp. 20-43, 2014.

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